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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/043,926 Filing Date: January 11, 2002

Appellant(s): RANTALAINEN, TIMO

John A. Garrity For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 08/06/2007 appealing from the Office action mailed 01/24/2006.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,647,262	Demetrescu	08-2000
2002/0082036	Ida et al.	10-2001

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5,930,721 Fried et al. 02-1999

6,725,039 Parmar et al. 05-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 15 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demetrescu et al. (Patent No. 6,647,262) In view of Ida et al. (Pub. No. 2002/0082036).

Consider **claims 1,15** and **29**. Demetrescu teaches a method/wireless communication/computer program for operating a mobile station in cooperation with a network operator, comprising: upon an occurrence of a RR procedure, including HO and CRS, that affects the mobile station, determining if a location procedure is ongoing in the mobile station (C2, L1-24, L56-67, C3, L17-55, teach radio transmission in handover and selected cell wherein measurement are report back to network which means as determining if a location procedure is ongoing in the mobile station). Demetrescu teaches the limitation as discuss **but fail to teach** and if it is, completing the location

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procedure and reporting measurement results in a message from the mobile station to a target radio network controller.

In an analogous art, Ida et al. teaches "Mobile communication system and Method for controlling transmission power". Further, Ida teaches and if it is, completing the location procedure and reporting measurement results in a message from the mobile station to a target radio network controller (Paragraphs [0025-0027], [0089-0090], teach measured location information of mobile station and transmitted to base station controller as Fig. 16, No.4, and further cited Paragraphs [0053, 0057], teach mobile station moves and change it present location means as location procedure is on going in the mobile station and Fig.1, No.11, Illustrate location generating means as determining location procedure and further cited paragraphs [0160-0164] teach registers location information which means as completing the location procedure before handoff/handover).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Demetrescu and Ida system, such that operating a mobile station in cooperation with a network operator, comprising: upon an occurrence of a RR procedure, including HO and CRS, that affects the mobile station, determining and report the location of mobile station to a target radio network controller, to provide means for quality, precise location and prevent interruption when handoff occurred.

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Claims 2-5, 7, 9-12, 16-18, 21, 23-26, are rejected under 35 U.S.C. 103(a) as being unpatentable over Demetrescu et al. (Patent No. 6,647,262) In view of Ida et al. (Pub. No. 2002/0082036) and further view of Fried et al. (Patent No. 5,930,721).

Consider claims 2 and 16, Demetrescu and Ida teach the limitation of claim as discuss above but fail to teach a method as in claim 1, wherein the location procedure is executed during a Combined Hard Handover and SRNS Relocation procedure for at least one of a PS or a CS domain, and applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS relocation.

In an analogous art, Fried teaches "Emulating an advanced control algorithm in a mobile communications system". Further, **Fried teaches** a method as in claim 1, wherein the location procedure is executed during a Combined Hard Handover and SRNS Relocation procedure for at least one of a PS or a CS domain, and applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS relocation (Abstract, C5, L25-44).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Demetrescu, Ida and Fried system, such that the location procedure is executed during a Combined Hard Handover and SRNS Relocation procedure for at least one of a PS or a CS domain, and applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS relocation, to provide means for determining precise location of mobile station

Consider claims 3 and 17. Demetrescu teaches a method as in claim 1, wherein

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the location procedure is executed during a Combined Cell/URA/GRA Update and SRNS Relocation procedure for a PS domain, and applies to both intra-SGSN SRNS relocation and for inter-SGSN SRNS relocation (C3, L1-16, teach handover set up applies inter and intra at the SGSN).

Consider **claims 4, 7, 18 and 21.** Ida teaches a method as in claim 1, further comprising sending LCS parameters from a source RNC/BSC to a target RNC/BSC (Fig.16, Illustrate No.4 as source RNC/BSC and No.2 as target RNC/BSC).

Consider **claim 5.** Ida teaches a method as in claim 4, wherein the LCS parameters are sent in a transparent manner (Page 6, Paragraphs [0099-0100] teach transceiver location information within transparent manner).

Consider **claims 9-12 and 23-26.** Ida teaches a method as in claim 5, where the LCS parameters comprise at least one of: a requested location accuracy; a requested location response time; details pertaining to a currently ongoing location process; and a GMLC address (Page 1, Paragraph [0010], Page 5, Paragraphs [0089-0090]).

Claims 6, 8, 13-14, 20, 22 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demetrescu et al. (Patent No. 6,647,262) In view of Ida et al. (Pub. No. 2002/0082036) in view of Fried et al. (Patent No. 5,930,721) and further view of Parmar et al. (Patent No. 6,725,039).

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Consider claims 6 and 20. Demetrescu, Ida and Fried teach the limitation of claims as discuss above but fail to teach a method as in claim 4, wherein for a UTRAN case the LCS parameters are sent in a Source RNC to Target RNC Transparent Container in a Relocation Required message.

In an analogous art, Parmar teaches "Mobile telecommunications system".

Further, **Parmar teaches** a method as in claim 4, wherein for a UTRAN case the LCS parameters are sent in a Source RNC to Target RNC Transparent Container in a Relocation Required message (C1, L42-59, Fig.1, Illustrate UTRAN resources which means as UTRAN case the LCS parameters).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Demetrescu, Ida, Fried and Parmar system, such that UTRAN case the LCS parameters are sent in a Source RNC to Target RNC Transparent Container in a Relocation Required message, to provide means for voice and data maintain connection wherever the location of mobile station.

Consider **claims 8 and 22.** Parmar teaches a method as in claim 1, further comprising sending LCS parameters to the target RNC in a Forward SRNS Context message (C3, L14-32, teach forwarding information contain UTRAN which inherently carry SRNS Context message).

Consider **claims 13-14 and 27-28.** Parmar teaches a method as in claim 1, wherein the message is sent before/after sending a UTRAN Mobility Information

Confirm message from the mobile station to the target RNC/BSC (C1, L41-64, C3, L14-32).

(10) Response to Argument

In response to appellant's argument in claim 1 and similar limitation recited in claims 15 and 29 that Demetrescu does not teach "determining if a location procedure is ongoing in the mobile station".

Examiner respectfully disagrees, Demetrescu teaches "determining if a location procedure is ongoing upon an occurrence of RR procedure" (C2, L1-24, L56-67, C3, L17-55 teach mobile station handover from one cell (base station) to other cell (base station). The handoff itself constitutes determining if a location procedure is ongoing, because the mobile travel from one base station (cell) to another base station (cell); wherein the mobile station reports a measurement list of cell to the network and the network decides that handover should take place (see C3, L41-55). Since Demetrescu does not mention the "location", "position" or other verbiage indicative of geographic location, but this would be well known for a person having ordinary skill in the art that the "handoff" would necessarily involve transmitting data from old base station/cell to the new base station/cell when the mobile station move from one location to another location, please see Fig.4/Fig.5 Illustrate the mobile handoff from BSC old to BSC new).

Further, the language of claims such as "If a location" or "if it is" is broad and open-end, giving examiner an alternate option of either "yes" or "no" or neither

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necessarily required as part of a positive recited method step. Therefore, examiner interpreted "determining if a location procedure is ongoing in the mobile station is ongoing upon an occurrence of RR procedure" as broadest reasonable interpretation and it is proper.

In response to appellant's argument in claim 1 and similar limitation recited in claims 15 and 29 that reference fail to teach "and if it is, completing the location procedure and reporting measurement results in a message from the mobile station to a target radio network controller".

Examiner respectfully disagrees, Ida teaches "and if it is, completing the location procedure and reporting measurement results in a message from the mobile station to a target radio network controller" (Paragraphs [0025-0027], [0089-0090], teach mobile station transmits the measure location information to base station which means as reporting measurement results in a message from the mobile station to a target radio network controller, the "target network controller" would read on "base transceiver station (BTS)" where the mobile station move into either BTS A, B or C as Fig.16 Illustrate and paragraph [0053-0057] clearly teach the mobile station moves, change or handoff to new location, the mobile station transmits measurement location to base station. That is, the mobile station reporting measurement from the mobile station to a target radio network controller).

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Therefore examiner interpreted and "if it is, completing the location procedure and reporting measurement results in a message from the mobile station to a target radio network controller" as broadest reasonable interpretation.

In response to appellant's argument in claims 2 and 16 that reference fail to teaches "wherein the location procedure is executed during a Combined Hard Handover and SRNS Relocation procedure for at least one of a PS or a CS domain, and applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS relocation".

Examiner respectfully disagrees, in Fried teaches "wherein the location procedure is executed during a Combined Hard Handover and SRNS Relocation procedure for at least one of a PS or a CS domain, and applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS relocation" (C5, L25-44 and Fig.1 Illustrate and teach the PS package switch mobile station 20 response cell selection and reselection which obviously in handoff. Fried et al. silent on Combined Hard Handover and SRNS Relocation and applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS relocation. However, this limitation is well know wherein appellant admitted teaching in the background which described in paragraph [0007] and Fig.2 (prior art) illustrate).

Therefore examiner interpreted "wherein the location procedure is executed during a Combined Hard Handover and SRNS Relocation procedure for at least one of a PS or a CS domain, and applies to both intra-SGSN/MSC SRNS relocation and inter-

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SGSN/MSC and SRNS relocation" and pointing to the background that teach and interpretation as broadest and reasonable.

In response to appellant's argument in claims 4, 7, 18 and 21 that non of base transceiver of Ida reference are target RNC/BSCs.

Examiner respectfully disagrees, in Ida reference and Fig.16 Illustrate BTS host equipment No.4 wherein control the communication of BTS A-C when mobile station move/travel/handoff from one cell to another cell of BTS base transceiver station (A, B or C) and the BTS is as read on the target RNC/BSCs.

Therefore examiner interpreted "sending LCS parameters from a source RNC/BSC to a target RNC/BSC" as broadest reasonable interpretation.

In response to appellant's argument in claims 9-12 and 23-26 that Ida reference do not teach "LCS parameters comprising; a requested location response time; details pertaining to a currently ongoing location process; and a GMLC address".

Examiner respectfully disagrees and the rejection is base on claim language that giving the examiner an option selected only one of the limitation wherein Ida teaches "where the LCS parameters comprise at least one of: a requested location accuracy; a requested location response time; details pertaining to a currently ongoing location process; and a GMLC address (Paragraph [0010], [0089-0090] teach present location of mobile station and measurement location information and detecting movement of base on the measurement which read on at least one of requested location accuracy; a

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requested location response time; details pertaining to a currently ongoing location process).

Therefore examiner interpreted "where the LCS parameters comprise at least one of: a requested location accuracy; a requested location response time; details pertaining to a currently ongoing location process; and a GMLC address" as broadest reasonable interpretation and it is proper.

In response to appellant's argument in claims 13-14, and 27-28 that nowhere in Parmar reference teach "UTRAN mobility information confirm message".

Examiner respectfully disagrees, in Parmar reference teach "wherein the message is sent before/after sending a UTRAN Mobility Information Confirm message from the mobile station to the target RNC/BSC" (C1, L41-64, C3, L14-32 teach a method of processing handover and translating the GSM parameters to UTRAN parameters wherein the parameters contain voice, data, i.e., further, the UTRAN parameters in the users equipment (EU) which EU transmitted and received or communication with network, please see C2, L26-37 which more clear and clarify.

Therefore examiner interpreted "wherein the message is sent before/after sending a UTRAN Mobility Information Confirm message from the mobile station to the target RNC/BSC" as broadest reasonable interpretation.

In response to appellant's argument in claims 6 and 20 that nowhere in Parmar reference teach "wherein for a UTRAN case the LCS parameters are sent in a Source RNC to Target RNC Transparent Container in a Relocation Required message" (C1,

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L42-59, Fig.1, Illustrate processing handover wherein the UE obtain UTRAN parameter and transceiver with the network when UE moving from one location to another location which means as Relocation Required message are sent).

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Therefore examiner interpreted "wherein for a UTRAN case the LCS parameters are sent in a Source RNC to Target RNC Transparent Container in a Relocation Required message" as broadest reasonable interpretation.

In response to appellant's argument in claims 8 and 22 that Parmar reference do not cure the deficiencies in the rejections and request to withdrawn.

Examiner respectfully disagrees and the rejection is cure base on introduction of using Parmar reference as further teaches beside Demetrescu and Ida. Therefor the rejection is maintained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Conferees:

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Joseph Fields

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MINI